



## State of Nevada – Department Of Personnel

### CLASS SPECIFICATION

<u>TITLE</u>	<u>GRADE</u>	<u>EEO-4</u>	<u>CODE</u>
SEISMOGRAPHIC RECORDS TECHNICIAN III	29	C	6.615
SEISMOGRAPHIC RECORDS TECHNICIAN II	27	C	6.618
SEISMOGRAPHIC RECORDS TECHNICIAN I	23	C	6.621

#### SERIES CONCEPT

This class series encompasses positions that perform specialized technical work in support of seismic research by monitoring, compiling and interpreting seismic data.

Incumbents monitor drum recorders, strip chart recorders, and digital recording systems for activity. Seismic activity is analyzed and preliminary determinations are made regarding location and magnitude by identifying various types seismic waves. Maintains a log of significance of seismic arrivals in daily preliminary reading sheets or computer files. Documents problems with the recording systems and data files and submits to appropriate staff for correction.

Incumbents assist professional staff in reviewing earthquake activity and conduct analysis regarding the location, size and type of seismic events. Employs various computer programs to plot and analyze seismic data and to present spatial and temporal patterns of seismic activity.

Incumbents prepare and maintain all documentation of work completed and files created to provide a tracking system for data quality, for routing and processing of data, and for status and location of archived data.

Incumbents provide information to seismology staff, State and governmental agencies, the media and the general public regarding seismic recording and seismic events in the State of Nevada.

Incumbents archive and retrieve seismic data and related records in several media, including paper, film, magnetic tapes, and optical disks. Keep logs describing location, types, chronology, and characteristics of seismic data.

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#### CLASS CONCEPTS

##### SEISMOGRAPHIC RECORDS TECHNICIAN III

Under direction, at the advanced journey level, performs the full range of duties in the series concept and in addition, has responsibility for all aspects of assigned equipment, the prioritizing and scheduling of work, inventory, cost estimations, and performs lead supervision and training of students and support staff.

The Seismographic Records Technician III is distinguished from lower level technicians by providing independent contributions based on a working knowledge and application of seismology. Provides analysis and interpretation of seismic data as directed.

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### CLASS CONCEPTS (cont.)

Positions at this level are further distinguished by having responsibility for integrity of all archived seismic data and for maintenance of records of this broad data.

#### SEISMOGRAPHIC RECORDS TECHNICIAN II

Under general supervision, at the journey level, performs the full range of duties in the series concept.

#### SEISMOGRAPHIC RECORDS TECHNICIAN I

Under direct supervision, receives training in the performance of all or part of the duties outlined in the series concept. This is the entry level in the series and provides for progression to the Seismographic Records Technician II level upon satisfactory completion of the probationary period meeting the minimum requirements and with the recommendation of the hiring authority.

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### MINIMUM QUALIFICATIONS

#### SEISMOGRAPHIC RECORDS TECHNICIAN III

##### EDUCATION AND EXPERIENCE:

I

Graduation from high school, 50 semester hours from an accredited college, university or vocational school which must have included 24 semester hours in physical science and/or math, and two years of experience in seismology involving the monitoring, compiling and interpretation of seismographic data, preparing reports and maintaining related equipment; OR

II

Two years of experience at the Seismographic Records Technician II level; OR

III

An equivalent combination of education and experience in which the applicant has demonstrated possession of the entry level knowledge, skills and abilities.

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES: (These may be acquired on the job and/or needed to perform the work assigned.)

Knowledge of the functions of the different divisions of the department to obtain needed information and/or where to direct questions. Knowledge of department policy and procedure as applied to the prioritizing and scheduling of work, data reporting requirements and equipment maintenance. Working knowledge of outside service agencies. Familiarity with quality assurance procedures.

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### MINIMUM QUALIFICATIONS (cont.)

#### FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES: (cont.)

Ability to operate and maintain a variety of specialized mechanical and electrical equipment associated with seismographic recording and data retrieval. Ability to run a wide variety of computer programs in performing the duties of the position. Ability to work with several computing systems and use computer networking tools.

ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES: (Applicants will be screened for possession of these through written, oral, performance or other evaluation procedures.)

Detailed knowledge of the principles and practices of seismology. Knowledge of standard seismic recording and playback systems. Detailed knowledge in the interpretation of seismographic records.

Ability to perform seismographic analysis in the location of local, regional and teleseismic earthquakes. Ability to make group presentations to provide information or explain seismic data. Ability to read and interpret technical manuals and specifications. Ability to set up and operate a variety of seismographic equipment. Ability to manipulate database on a micro-computer. Ability to accurately communicate seismographic data to the public.

In addition, all other knowledge, skills and abilities required at the lower level of this series.

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### SEISMOGRAPHIC RECORDS TECHNICIAN II

#### EDUCATION AND EXPERIENCE:

I

Graduation from high school, 30 semester hours from an accredited college, university or vocational school which must have included 12 semester hours in physical science and/or math, and two years of experience in seismology involving the monitoring, compiling and interpretation of seismic data;  
OR

II

One year of experience at the Seismographic Records Technician I level; OR

III

An equivalent combination of education and experience in which the applicant has demonstrated possession of the entry level knowledge, skills and abilities.

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### MINIMUM QUALIFICATIONS (cont.)

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES: (These may be acquired on the job and/or needed to perform the work assigned.)

Knowledge of the functions of the different divisions of the department to obtain needed information and/or where to direct questions. Knowledge of department policy and procedure as applied to the prioritizing and scheduling of work, data reporting requirements and equipment maintenance. Working knowledge of outside service agencies.

Ability to operate and utilize a variety of specialized electronic and mechanical equipment and computer systems with associated software, pertaining to seismic recording and data retrieval.

ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES: (Applicants will be screened for possession of these through written, oral, performance or other evaluation procedures.)

Knowledge of the principles and practices of seismology. Knowledge of standard seismic systems. Knowledge of earthquake location and magnitude determination procedures.

Ability to read and interpret seismic recordings. Ability to perform seismic analysis in the location of local, regional and teleseism earthquakes. Ability to operate a variety of equipment related to seismic recording and retrieval. Ability to operate computers and associated software.

In addition, all other knowledge, skills and abilities required at the lower level of this series.

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### SEISMOGRAPHIC RECORDS TECHNICIAN I

#### EDUCATION AND EXPERIENCE:

##### I

Graduation from high school, preferably supplemented by college level courses in mathematics and science; OR

##### II

An equivalent combination of education and experience in which the applicant has demonstrated possession of the entry level knowledge, skills and abilities.

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES: (These may be acquired on the job and/or needed to perform the work assigned.)

Knowledge of the principles and practices of seismology. Broad knowledge of standard seismic systems.

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### MINIMUM QUALIFICATIONS (cont.)

#### FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES: (cont.)

Ability to operate a variety of hand and power tools. Ability to operate a micro computer and associated software.

ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES: (Applicants will be screened for possession of these through written, oral, performance or other evaluation procedures.)

Basic knowledge of seismographic terms and equipment. Knowledge of basic laboratory procedures.

Ability to perform basic mathematical calculations. Ability to listen perceptively. Ability to work under the stress of frequent interruptions. Ability to establish and maintain cooperative working relationships with co-workers and the public. Ability to follow oral and written instructions. Ability to accurately transcribe data. Ability to communicate effectively to obtain information, describe situations and explain data.

This class specification is used for classification, recruitment and examination purposes. It is not to be considered a substitute for work performance standards for positions assigned to this class.

	<u>6.615</u>	<u>6.618</u>	<u>6.621</u>
ESTABLISHED:	7/18/80	7/18/80	2/1/68
REVISED:			11/16/72
REVISED:		9/27/79R	
		10/24/80PAC	
REVISED:			7/18/80
REVISED:	10/24/80		10/24/80
REVISED:	7/1/93P	7/1/93P	7/1/93P
	8/31/92PC	8/31/92PC	8/31/92PC
REVISED:	1/13/95UC	1/13/95UC	1/13/95UC